PRIMARY CARE CASE STUDY 0886

High-Quality Primary Care: The *MedExpress* General Practice in St. Petersburg

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Submitted by the Zdrav*Reform* Program to:
AID/ENI/HR/HP

AID Contract No. CCN-0004-C-00-4023-00
Managed by Abt Associates Inc.
with offices in: Bethesda, Maryland, U.S.A.
Moscow, Russia; Almaty, Kazakhstan; Kiev, Ukraine

July 1997

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1.0 INTRODUCTION

In 1993, the United States Agency for International Development (USAID) initiated the Zdrav*Reform* Program (ZRP) to assist with financing, management, and organizational initiatives in the health care systems of the countries of the former Soviet Union. The program has collaborated with national and local government officials, policy makers, managers, and providers to design, implement, and evaluate initiatives aimed at improving financial sustainability, efficiency, and quality of care, while preserving equitable access. One of ZRP's initiatives in Russia was a program of small grants to help fund pilot projects that were proposed by local innovators in an effort to develop new solutions to health financing, management, delivery, and organizational problems. This report analyzes the effects of one such grant, which was given to the *MedExpress* Insurance Company in St. Petersburg, Russia, and used by the company to help establish a general medical practice in that city.

2.0 ORGANIZATION AND FINANCING OF RUSSIA'S HEALTH CARE SYSTEM

The first major health system reform in post-Soviet Russia was the formation of Mandatory Health Insurance (MHI) funds, which combine state and employer contributions for health care. These funds operate at the oblast level and distribute funding to districts (rayons). Each district administration selects one or more insurance companies to receive this funding. The insurance companies, in turn, sign contracts with health care providers (usually, hospitals and polyclinics) to provide care to the population insured by the company. This arrangement permits at least two levels of supervision over the quality and efficiency of care: the insurance company, through its control of payments to providers; and the district administration, in its selection of insurance companies.

The power of the district administrations to choose among competing insurance companies encourages the companies to organize health care in a way that is both economical (so the company can make a profit) and politically successful: insurance companies must satisfy the district administrations' expectations for the funding provided or lose business to other companies that can do better. Other forms of competition have not been developed. Insurance companies do not compete directly for consumers and there is no competition among providers of free health care. The Soviet system created only a single source of medical care for each geographical area. Insurers do not compete to sign contracts with the best providers because they are the only purchasers of care in their area. Providers generally do not need to compete to obtain contracts from insurers because they have a monopoly in their area.

Patients have the same problem with providers as do the insurance companies. The existing system of polyclinic-based primary medical care does not give the patient any right to choose the medical institution or the physician who will provide care. Patients are assigned to polyclinics based on their residence and there is no competition between polyclinics. Consequently, these facilities suffer from low productivity. Polyclinics are

not motivated to provide prompt, efficient, and high quality care or to reduce the number of referrals made to hospitals, because polyclinic funding is not dependent on the quality of services provided or on the number of patients hospitalized but, instead, on the size of the staff and on the fixed number of patients assigned to the clinic. In fact, polyclinic staff can reduce their workload by referring patients to the hospital. Furthermore, there is a lack of competition among insurers providing obligatory insurance, and, consequently, these institutions have no incentive to guarantee the quality of medical services provided.

3.0 THE LOGIC OF GENERAL PRACTICE

The *MedExpress* Insurance Company is one of eleven medical insurance companies operating in the St. Petersburg area and is one of two insurers responsible for the city's Central District (*Tsentralnyi Rayon*). In order to compete successfully with the other companies, *MedExpress* wanted to develop innovative means of providing care and paying providers that would improve the quality and efficiency of the care provided. The company sought to make these improvements through a combination of three elements: payment incentives, competition, and reorganization to emphasize primary care. The main purpose of the grant from ZRP was to establish a general practice that would compete with the polyclinic, on the basis of the same payment incentives.

The method of payment used by *MedExpress* is intended to encourage both the polyclinic and the general practice to compete to have as many patients as possible. The general practitioners are not legally permitted to operate as separate MHI providers, but they are allowed to work for the polyclinic as independent contractors. *MedExpress* makes a capitation payment to the polyclinic for the outpatient care of each person enrolled with the polyclinic *or* the general practice. The *MedExpress* contract with the polyclinic stipulates that the polyclinic must hire the general practitioners under contract and pay them 60 percent of the capitation payment for each patient of the polyclinic who chooses one of the general practitioners as his/her primary care physician.[1] Thus, the polyclinic has an incentive to provide care that is of sufficiently high quality (and that is oriented to consumers' needs), such that patients choose to receive their primary care from polyclinic specialists rather than from one of the general practitioners, for in that case the polyclinic retains the full capitation payment for those patients.

The *MedExpress* contract also provides a strong incentive for the polyclinic to discourage hospitalization. *MedExpress* maintains a separate budget for inpatient care and pays hospitals a fixed amount per completed case. Good preventive care from the polyclinic that avoids the need for hospitalization is the only means to reduce the number of cases and achieve savings in this budget. The *MedExpress* contract provides that 95 percent of any savings in the in-patient budget will be given to the polyclinic. Savings attributable

[1] In principle, the polyclinic keeps 40 percent of the capitation payment in order to cover the cost of any services which the general practitioners themselves are unable to provide. However, there is a provision in the contract for adjusting the share of the capitation payment retained by the polyclinic, if the services provided by the general practitioners to their patients are greater (less) than normally expected.

to fewer hospitalizations of general practice patients are shared with the general practitioners.

In theory, payment incentives can be effective in the absence of a competitive environment. Thus, even without establishing the general practice, the payment system used by *MedExpress* gives the polyclinic an incentive to provide care that is both effective (by reducing the need for hospitalization) and economical (because if payment does not depend on polyclinic resources used, the incentive is to use the least amount of resources that is effective). By establishing the general practice to compete with the polyclinic, both the polyclinic and the general practice not only have the same economic incentives but compete for patients on the basis of providing maximum patient satisfaction. Even if the polyclinic is effective and economical, its funding will decrease if unhappy patients move to the general practice.

The principal step was the opening of a general practitioner's office within a polyclinic in the Central District. The office was staffed by two physicians, one internist and one pediatrician, who had received three years of Family Medicine studies at the St. Petersburg Postgraduate Medical Academy. The office was provided with a variety of equipment which would allow most common treatments and diagnostic tests, other than x-ray and ultrasound, to be performed in the office. The two general practitioners were provided access to inpatient departments, laboratory and hospital-based specialists, in order to supplement their own skills and equipment. Patients were given the right to choose between the general practitioners or the usual polyclinic staff. It was thought that competition between the general practitioners and the polyclinic staff would produce an increase in the quality of care. It was also believed that primary care organized around a general practice instead of polyclinics would be more efficient and of higher quality.

It was not necessary to have a general practice to have competition. Two polyclinics can compete with each other. The general practice was created to test whether an alternative to the polyclinic model could improve the quality and efficiency of care. It is an approach to primary care that is person-centered rather than specific to a medical condition. There are several advantages associated with the general practice model.

- *First Contact:* the general practitioner usually should be the first physician to see a patient, and the patient normally should see the same doctor every time he or she has a problem.
- *Longitudinality:* the general practitioner should attend the patient throughout an illness, from beginning to end.
- *Comprehensiveness:* The general practitioner should be capable of treating most aspects of the most common conditions.
- *Coordination:* the general practitioner should be aware of, and approve, all care that the patient receives.

This model assumes that a single physician with modest resources is capable of the diagnosis and treatment of a large proportion of common medical conditions. The model also presupposes that a physician develops long-term relationships with patients and families not only because it results in better understanding of a patient's problems but because the improvement in a patient's communication and access to a physician will improve cooperation and lead to better health and greater satisfaction with care. Physicians treat smaller populations of patients in greater depth. Hospitals and specialists, who provide the most expensive forms of care, are reserved for those patients most likely to require special facilities and expertise.

4.0 THE *MEDEXPRESS* GENERAL PRACTICE

The general practitioners' office was opened on August 1, 1995. Patients were solicited through regular advertisements on the local radio, information displays at the polyclinic, leaflets dropped into area residents' mail boxes, and talks given by general practice office workers. The first patient registered on August 20, 1995. By December 31, 1995, 379 had registered. The practice was most successful in attracting patients who had significant medical problems and were dissatisfied with their care. This small population made over 600 visits in the first three months. The average age was approximately 40 years and more than 20 percent were over age 60, which is about seven years older than the general population with a proportion nearly twice as large over 60. Such a difference would not make for a reasonable comparison to the much younger and healthier population served by the polyclinic.

It appeared it would require a very long and difficult process to solicit a population of patients for the general practice that would be both sufficiently large and similar to the polyclinic population to make the results of the experiment meaningful. It then was decided to assign one of the polyclinic catchment areas to the general practice. Residents of this area were automatically registered with the general practice but could return to the polyclinic if they wished; polyclinic patients from outside the catchment area could continue to register with the general practice.

Assigning a catchment area to the general practice increased the size of the practice to 3587 patients. By June 15, 1996, the general practice had grown to 3735. There was no improvement in the age structure: the average age increased by about one year and the proportion over age 70 is more than twice the general population. There is a low proportion of children, however, about one-third less than the general population. Because young children as well as the elderly require substantial health care resources, the expected per capita cost of caring for the general practice population is only about 5 percent higher than the general population.

Table 1. General Practice Enrollment, Age Structure (on June 15, 1996)

Age	**Number**
0-3	47
4-7	160
8-14	360
15-29	619
30-49	1 342
50-69	755
70 and over	452
TOTAL	**3 735**

The pattern of patient visits reported by the general practice, reported in the following table as monthly averages, has shown some changes over time but the most curious observation is how little change occurred between the last quarter of 1995 and the second quarter of 1996. The doctor's workload (time spent on consultations) appears to be no greater in the second quarter of 1996 when the practice has over 3700 patients than in 1995 when it had at most 379 patients. There is a modest increase in workload in the first quarter of 1996 but this seems to be what would normally be expected in the winter. The original 1995 patients may have been more ill on average but there should also be many ill patients among the new patients; about 400 of them are over age 70. The reason for this lack of change may have several explanations.

Table 2. General Practice, Average Monthly Visits

Type of consultation	August 21 - December 31, 1995	January 1 - March 31, 1996	April 1 - June 15, 1996
Home visit	22	21	20
Intensive home visits to monitor acute cases, treatment adjustment, dispensary records, etc.	12	8	12
Primary (initial) visit	50	58	42
Secondary (follow-up) visit - patient's initiative - GP's initiative	91 **!Syntax Error, .** 52	172 111 61	100 21 79
Screening	5	18	**!Syntax Error, .**
Advice by phone	10	18	**!Syntax Error, .**
TOTAL	**190**	**295**	**208**
Average length (minutes)	29	22	27
Hours per month	93	111	94

The original patients may no longer receive much care. The original patients were treated intensively in the fourth quarter of 1995 and may no longer require much attention. The decline in patient-initiated secondary visits may reflect the end of winter-related acute problems but also suggest the development of a pattern of continuity of care: patients will be less likely to seek medical attention for a non-urgent problem if they already have an appointment to see their physician in the future or they have confidence in the advice they were given on a preceding visit. The large number of physician-initiated secondary visits may reflect physician attention to preventing the need for emergency calls or hospitalization in the most difficult patients.

New patients may not be receiving much care. The current rate of consultation appears to be very low, less than one visit per person enrolled per year, with each consultation lasting an average 26 minutes which is even longer than the average visit to a polyclinic specialist (22 minutes). In contrast, the national average is about ten ambulatory visits per person per year, although this figure includes visits to specialists; the average visit to a primary care doctor in a regular polyclinic lasts less than ten minutes.[2] The general practice has been making about 17 referrals to specialists per month; and if one takes into account the follow-up visits to specialists that are likely to result from these referrals, one can estimate that patients of the general practice are receiving a total of about 120 hours of consultation time per month, or roughly two minutes per month per patient.[3] Under the polyclinic system in the past, there was average of 15 minutes per month of consultation time per patient, meaning that general practice patients are spending about 85 percent less time with physicians.

This very low expenditure of time suggests the possibility that many patients are receiving care somewhere else. There is no evidence that general practice patients are suffering from a lack of care (see below). Patients are not being turned away by the general practice; the general practice is operating at below full capacity. It is possible that general practice patients are more likely than polyclinic patients to go to pay clinics: they may regard the general practice as a good alternative to pay clinics, but nonetheless prefer both the general practice and pay clinics to the polyclinic. However, even if this is the case, the effect would be much too small to explain the low number of visits to the general practice.

If patients are being treated elsewhere, the most likely explanation is administrative error: patients assigned to the general practice are continuing to go to the polyclinic, where they are mistakenly accepted and treated by the polyclinic as its own patients. This possibility

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[2] The *MedExpress* general practitioners have been seeing 200-300 patients each month, which is approximately 100-150 patient visits per month per physician. This workload is similar to that of the primary care physicians at the Polyclinic of Family Medicine (PFM) in Dnieprodzerzhinsk, Ukraine, another experiment that was profiled in the previous case study. However, PFM receives about 50 percent more visits per enrolled person than *MedExpress*, even though PFM's clientele is comparatively younger and more stable.

[3] This calculation is based on the assumption that each referral to a *specialist* results in 3.4 secondary visits, the same number of *general practice* secondary visits per primary visit. This would mean that general practice patients make about 60 additional visits (20 hours) per month.

deserves further inquiry but is likely to be of only limited importance. If general practice patients are going directly to the polyclinic, it is very unlikely to be for a serious condition because the rate of hospitalization for patients *registered* with the general practice—i.e. irrespective of where these patients actually receive their care—is much lower than the rate of hospitalization for patients registered with the polyclinic (see below). If large numbers of general practice patients were being mistakenly treated by the polyclinic as polyclinic patients, the rates of hospitalization should be similar. Because it is uncertain whether all general practice patients are receiving sufficient attention, it would be worthwhile to do a small telephone survey of a sample of 30 or 40 patients in the general practice catchment area who have not attended the general practice to see if they have received care elsewhere or have had difficulties using the general practice.

The general practice physicians have been attending to less than 15 percnet of their patient population; only 447 of the 3735 patients have made an initial visit to the general practice in its first nine months of operation. This 15 percent, however, appears to be the population in greatest need of medical attention. The impact of the general practice on the use of hospital and emergency services has been dramatic. As indicated in Tables 3 and 4, the rate of emergency calls and hospital admissions among general practice patients is less than 40 percent of the average for the Central District. This would be expected if the general practice population were younger and healthier than average, but this is not the case; the general practice population contains many more elderly patients.[4]

Table 3. Emergency Calls By Patients of the General Practice

Emergency calls per month per 1000 population	**All outpatient providers in Central District of St. Petersburg**	**GP office**
3-4 qtr 1995	14.8	5.8
1st qtr 1996	14.8	5.5
2nd qtr 1996	16.7	5.6

Table 4. Hospital Admissions Among Patients of the General Practice

Hospital admissions per month per 1000 population	**All outpatient providers in Central District of St. Petersburg**	**GP office**
3-4 qtr 1995	21.7	9.4
1st qtr 1996	23.6	8.5
2nd qtr 1996	27.4	9.8

[4] These utilization rates are similar to those of the population served by the Polyclinic of Family Medicine in Dnieprodzerzhinsk, as reported in the preceding case study (6.1 emergency calls per month per 1000 population and 5.8 hospitalizations per month per 1000 population.)

The success achieved by the general practice in reducing emergency calls and hospitalizations indicates it is very unlikely that the general practice has had any harmful effects on the health of the population. While it is possible, at least in theory, that the low incidence of emergency calls and hospitalizations is a result of patients having died before they could receive hospitalization or emergency care (mortality data are not currently available), the normal course of deterioration of a patient's health should include several hospitalizations and emergency calls before a fatal event occurs.

The general practice has shown a remarkable ability to reduce the utilization of both its own resources (patient visits) and non-practice resources (emergency calls and hospitalizations). The same pattern can also be seen in the use of other medical services.

Table 5. Utilization of Diagnostic Services by General Practice Patients

Diagnostic Services	3rd-4th Qtr 1995		1st Qtr 1996		2nd Qtr 1996		All Qtrs.
Rate per 100 Clinic Visits	Delivered by a GP	Referral	Delivered by a GP	Referral	Delivered by a GP	Referral	
ECG	28.5	-	8.7	-	11.6	-	15.6
Bacteriological	0.2	0.4	2.8	-	1.2	-	1.7
Blood Tests	10.9	13.0	5.0	5.1	6.0	4.6	14.5
Total Laboratory	39.6	13.4	16.5	5.1	18.8	4.6	31.8
X-ray Examinations	-	1.2	-	1.2	-	1.9	1.4
Diagnostic Ultrasound	-	1.9	-	1.6	-	5.1	2.6
Total Diagnostic Imaging	-	3.1	-	2.8	-	7.0	4.0

Diagnostic Services per 10,000 population (annual rate)	3rd-4th Qtr 1995	1st Qtr 1996	2nd Qtr 1996
Laboratory	31,878	2,127	1,566
X-ray Examinations	744	119	129
Diagnostic Ultrasound	1,116	159	339

The use of laboratory services was greatest in 1995 when the general practice was becoming familiar with its patients and the average patient had a greater burden of disease. While these rates do not include tests ordered by non-general practice physicians for general practice patients, they are nonetheless very much lower than the rates typically recorded in the NIS of about 90,000 tests annually per 10,000 population. The low rates of specialist referral by the general practice make it probable that the overall use of laboratory tests by general practice patients is not much higher than what is reported here.[5]

[5] Once again, the pattern of care for the general practice is similar to that of the PFM in Dnieprodzerzhinsk, which averages 11,884 tests annually per 10,000 population. The general practice's use of x-ray and ultrasound also is much lower than the typical NIS rates of 4000 per 10,000 population for x-rays and 1500

The general practice's service utilization rates, when calculated in proportion to the number of clinic visits, are closer to those normally observed in the NIS. The general practice rate of 31.8 laboratory tests *per 100 clinic visits* still is lower than the 80 laboratory tests per 100 clinic visits normally observed in the NIS, but is close to the 39.8 laboratory tests per 100 clinic visits observed at the PFM in Dnieprodzerzhinsk. The general practice rate of 4.0 x-rays and ultrasound procedures per 100 clinic visits is the same as that normally observed in the NIS (for PFM patients the rate is 2.8 procedures per 100 clinic visits).

These figures suggest that, in general in the NIS, the use of medical resources is not closely related to the prevalence of disease in the population, but depends mostly upon the availability of those resources and the frequency with which patients see physicians. This same phenomenon also has been seen in the United States and other Western countries. **The general practice is able to reduce the amount of testing performed on its patients by reducing the number of referrals to other physicians.**

Table 6 shows how the general practice has reduced the rate of referrals by over 80 percent. In the polyclinic system, most referrals are for simple procedures, basic neurological examinations, and examinations of the eyes, ears, nose and throat, which the general practitioners are able to perform because they have the necessary equipment and a small amount of refresher training.

per 10,000 population for ultrasound and is similar to the PFM rates of 645 x-rays and 178 diagnostic ultrasounds annually per 10,000 population.

Table 6. Use of Therapy and Specialty Referrals by General Practice Patients

Medical Services	3rd-4th Qtr 1995		1st Qtr 1996		2nd Qtr 1996	
Rate per 100 clinic visits	Delivered by a GP	Referral	Delivered by a GP	Referral	Delivered by a GP	Referral
Immunization	-	0.4	5.2	0.3	9.9	-
Massage	-	0.8	0.5	0.7	5.1	0.7
Intravenous injections	1.0	-	1.6	-	1.4	-
Physiotherapy	-	1.2	-	3.3	-	2.4
Total Therapy	**1.0**	**2.5**	**7.4**	**4.3**	**16.4**	**3.1**
ENT (otorhinolaryngology)	12.0	-	6.2	0.1	4.6	0.2
Neurology	-	-	4.1	0.5	5.6	0.7
Ophthalmology	-	-	-	-	-	-
Eye tonometry	2.1	-	2.5	-	1.0	-
Visual acuity and eyeglasses	4.9	0.4	4.3	0.5	2.9	-
Fundoscopy	2.5	-	5.0	0.8	6.3	-
Surgical procedures	0.4	-	0.5	0.1	0.7	0.5
Orthopedics	-	-	0.5	0.1	0.5	0.2
Urology	-	-	0.1	0.1	-	0.5
Gynecology	-	-	0.7	0.8	-	1.2
Oncology	-	-	-	-	0.2	0.2
Proctology	-	-	-	-	-	0.2
Other Specialties	-	4.5	-	-	-	-
Total Specialty Procedures	**21.9**	**4.9**	**24.0**	**3.2**	**21.7**	**3.9**

The savings achieved by the general practice is seen in the following chart. Although expenditure on primary care is increased by 200 percent, hospital costs are reduced by 64 percent and the use of polyclinic resources other than primary care is reduced by 85 percent compared to the usual system of care. Total costs have been reduced by 55 percent; if an adjustment for the greater age of the general practice population is made, the savings increase to 57 percent. This experience is again remarkably similar to the PFM, where the adjusted savings were 53 percent. Because 95 percent of the inpatient budget savings are given to the polyclinic, of which 60 percent is given to the general practice, the general practice should receive almost three times as much money for the services it provides (43/15) while the polyclinic receives over *nine* times the cost of the services it provides to general practice patients (28/3). This suggests that the 40 percent share of capitation payments and savings retained by the polyclinic is excessive and could, with fairness, be reduced to 20 percent.

	Hospital	Primary Care	Other Polyclinic
Usual Budget	75%	5%	20%
GP Budget	75%	15%	10%
Actual Costs	**!Syntax Error, .**	15%	**!Syntax Error, .**
Reallocated Savings	**!Syntax Error, .**	43%	28%

5.0 LESSONS LEARNED FROM THE *MEDEXPRESS* GENERAL PRACTICE

The experience of the *MedExpress* general practice demonstrates that **changing the structure of the health care system to focus on primary care can result in care of equal or better quality at lower cost**. Patient satisfaction is also enhanced; no patient enrolled in the general practice has requested to return to the polyclinic. The similarity of the results achieved to those achieved by a similar experiment in Dnieprodzerzhinsk, Ukraine, prove that the results were not due to special skills or circumstances. The common elements in both experiments were: increased funding for primary care services; and increased responsibilities for primary care doctors.

The high rate of return from a modest investment in primary care indicates the mistaken nature of past budget policies in response to the economic crisis. It appears that the goals of past policies were: (1) to keep facilities open and workers employed; and (2) to achieve savings by reducing salaries and expenditures on supplies and equipment. In an attempt to conserve and optimize the use of resources, access to most supplies and equipment was limited to specialists. By confining most equipment to referral centers, the authorities hoped to ensure that equipment would not be lying idle.

Unfortunately, this policy has had significant, negative consequences. Each time a patient presents with a problem, the patient is likely to make several visits to several different physicians. Inefficiency at lower levels of the system promotes inefficiency at the higher levels. Primary care doctors, because of their lack of equipment and relatively narrow training, can do little other than to refer their patients to specialists at polyclinics and hospitals. A polyclinic specialist who suspects a simple problem outside his specialty does not have the time or equipment to resolve the problem, and so he or she often must refer the patient to another specialist. Specialists at polyclinics spend much of their time performing routine examinations because the primary care doctors lack the necessary equipment to do these examinations. But when a polyclinic specialist recognizes a problem in his specialty, lacking the time or equipment to resolve the problem on the spot, he or she must send the patient to the hospital. The hospitals then become filled with patients who do not require close observation. Because the numbers of referrals and tests are proportional to the number of visits, and each consultation and test result is likely to generate additional tests and referrals, the demand for resources grows rapidly until it exceeds the available supply. In most cases, patients receive little benefit from hospitalization or consultation with a specialist, because their problems are basic enough to be treated at a much lower level of care.

Of course, these policies do benefit members of the health care bureaucracy, who often demand more funding, and who object to cuts in spending, by citing the high utilization of resources, even though the real cause of high utilization is severe inefficiency. Most physicians do much less than their skills and training would permit them to do. In turn, the numbers of physicians, facilities, and support staff are all much higher than they would be, if physicians were used more efficiently. And the unnecessarily large number of facilities leads to increased utility and maintenance expenditures.

Maximizing physician efficiency at the level of first contact with the patient, i.e. primary care, is the best way to reduce inefficiency throughout the entire system. The staff of the *MedExpress* general practice cite numerous reasons for their comparatively much greater efficiency:

1) a high level of professional training: physicians have a certificate, signifying completion of three years of family medicine studies at the St. Petersburg Physician Post-Graduate Medical Academy; and the general practice nurses likewise have completed advanced studies at the St. Petersburg Medical College;
2) a good supply of medical and auxiliary equipment to the GP office, including modern devices and testing units, patient record database, disease history forms, etc.;
3) new outpatient care structures for St. Petersburg that permit 24-hour communications between patient and physician, e.g. pagers and telephones, which usually are lacking at polyclinics; these help to control admissions, as well as limit unnecessary ambulance calls;
4) close collaboration with specialists which both reduces the number of unnecessary referrals and increases the effectiveness of the referral care that does take place;
5) the provision of day care services by the general practice, which reduces the demand for hospitalization;
6) increased personal responsibility of the general practitioner for the patient: the general practitioner is solely accountable for the services he delivers; and with no department chief, clinical director or chief doctor above him, he can not delegate part of his responsibility to specialists as the primary care physician at a polyclinic often does;
7) improved continuity of care, i.e. an increased ability to monitor the health status of whole families over time and across successive episodes of illness; and
8) a focus on patients with the greatest need.

The experience of the *MedExpress* general practice underscores the potential of high quality primary care to improve the quality and efficiency of health care in all of the countries of the former Soviet Union. The application of these principles should allow consistent reductions in hospitalizations of over 60 percent and reductions in overall costs of more than 50 percent.

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APPENDIX: EQUIPMENT ACQUIRED FOR THE MEDEXPRESS GENERAL PRACTICE

1. Physician kit WA 76520
2. PC Pentium 75
3. PC Presario AT486
4. Jet printer HP DJ-320
5. Jet printer HP DJ-540
6. Cartridges Black Deskjet and Color HP Deskjet
7. ECG EC 12K-01
8. Biochemical Laboratory Stat Fax
9. Set of chemical agents for the laboratory
10. Ophthalmologic testing set
11. Maklakov tonometer
12. Character projector PZ-MD
13. Riestar set (4 pcs) with batteries
14. Floor scale model 913
15. Monitor AD MF 30 (2 pcs)
16. Monitor AND
17. Monitor AD VA 731 with a battery and charging device
18. Height measuring tape
19. Peak flow meter ASSEES (2 pcs)
20. Caps to the peak flow meter (100 pcs)
21. Stethoscope 04-600 (3 pcs)
22. Color tables (16 pictures)
23. Agents for the laboratory
24. Dryer-case
25. Binocular microscope
26. Panchenkov device
27. Portable ECG MSC 2001 (U.S. make)
28. Urine tester Urilux
29. Goryaev chambers
30. Sterilization vessels
31. Office furniture set
32. Gratings, ledges, curtains and screens.
33. Medical furniture set
34. Soft furniture set
35. Medical scales VME-1-15
36. Lighting devices
37. Stationery
38. Cleaning equipment
39. Pagers